DETAILED ESTIMATE

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to Roads and Drains at Thanisandra ICICI Bank Surrounding Area Roads in Ward No 06 Thanisandra

								Estimation Cost.Rs	**10000000.00**
Sl No	**Description of work**		**Mesurement**				**Qty**	**Rate**	**Amount**
		Unit	**No.**	**L**	**B**	**D**			
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Cross Road -1	Cum	1	45.00	1.05	1.05	49.61		
	Cross Road 2	Cum	1	43.00	0.90	0.90	34.83		
	Cross Road 5	Cum	1	47.00	0.90	0.90	38.07		
	Cross Road 6	Cum	2	48.00	0.90	1.05	90.72		
	Cross Road 7	Cum	1	40.00	0.90	0.90	32.40		
	Cross Road 10	Cum	1	38.00	0.90	0.90	30.78		
	Cross Road 11	Cum	1	29.00	0.90	0.90	23.49		
	Main Road	Cum	2	172.00	1.20	1.05	433.44		
	Connectting SWD Drain	Cum	1	16.70	1.20	1.20	24.05		
	Cross Road 3	Cum	1	34.60	0.90	0.90	28.03		
	Cross Road	Cum	2	56.00	1.05	1.05	123.48		
	New CC Culvert								
	Main Road	Cum	1	9.00	2.10	1.10	20.79		
		Cum	1	6.40	2.10	1.10	14.78		
		Cum	1	8.30	2.10	1.25	21.79		
		Cum	1	6.80	2.10	1.25	17.85		
		Cum	2	6.80	2.10	1.10	31.42		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	**207.60**							
	Total						**1015.52**	**207.60**	**210822.78**
2	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	Cross Road -1	Cum	1	45.00	1.05	0.15	7.09		
	Cross Road 2	Cum	1	43.00	0.90	0.15	5.81		
	Cross Road 5	Cum	1	47.00	0.90	0.15	6.35		
	Cross Road 6	Cum	2	48.00	0.90	0.15	12.96		
	Cross Road 7	Cum	1	40.00	0.90	0.15	5.40		
	Cross Road 10	Cum	1	38.00	0.90	0.15	5.13		
	Cross Road 11	Cum	1	29.00	0.90	0.15	3.92		
	Main Road	Cum	2	172.00	1.20	0.15	61.92		
	Connectting SWD Drain	Cum	1	16.70	1.20	0.15	3.01		
	Cross Road 3	Cum	1	34.60	0.90	0.15	4.67		
	Cross Road	Cum	2	56.00	1.05	0.15	17.64		
	For New CC Culvert								
	Main Road	Cum	1	9.00	2.10	0.15	2.84		
		Cum	1	6.40	2.10	0.15	2.02		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
		Cum	1	8.30	2.10	0.15	2.61		
		Cum	1	6.80	2.10	0.15	2.14		
		Cum	2	6.80	2.10	0.15	4.28		
	For CC Road								
	Cross Road -1	Cum	1	45.00	3.60	0.15	24.30		
	Cross Road 2	Cum	1	43.00	3.70	0.15	23.87		
	Cross Road 5	Cum	1	47.00	3.70	0.15	26.09		
	Cross Road 6	Cum	1	48.00	3.20	0.15	23.04		
	Cross Road 7	Cum	1	40.00	3.30	0.15	19.80		
	Cross Road 10	Cum	1	38.00	3.50	0.15	19.95		
	Cross Road 11	Cum	1	29.00	2.40	0.15	10.44		
	Cross Road 3	Cum	1	34.60	3.40	0.15	17.65		
	Basic rate	5115.00							
	Area weightage 6%	306.90							
	Sub Total	5421.90							
	Total						**312.90**	**5421.90**	**1696496.24**
3	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	Bottom Raft								
	Cross Road -1	Cum	1	45.00	1.05	0.15	7.09		
	Cross Road 2	Cum	1	43.00	0.90	0.15	5.81		
	Cross Road 5	Cum	1	47.00	0.90	0.15	6.35		
	Cross Road 6	Cum	2	48.00	0.90	0.15	12.96		
	Cross Road 7	Cum	1	40.00	0.90	0.15	5.40		
	Cross Road 10	Cum	1	38.00	0.90	0.15	5.13		
	Cross Road 11	Cum	1	29.00	0.90	0.15	3.92		
	Main Road	Cum	2	172.00	1.20	0.15	61.92		
	Connectting SWD Drain	Cum	1	16.70	1.20	0.15	3.01		
	Cross Road 3	Cum	1	34.60	0.90	0.15	4.67		
	Cross Road	Cum	2	56.00	1.05	0.15	17.64		
	Side Walls								
	Cross Road -1	Cum	2	45.00	0.15	0.75	10.13		
	Cross Road 2	Cum	2	43.00	0.15	0.60	7.74		
	Cross Road 5	Cum	2	47.00	0.15	0.60	8.46		
	Cross Road 6	Cum	4	48.00	0.15	0.75	21.60		
	Cross Road 7	Cum	2	40.00	0.15	0.60	7.20		
	Cross Road 10	Cum	2	38.00	0.15	0.60	6.84		
	Cross Road 11	Cum	2	29.00	0.15	0.60	5.22		
	Main Road	Cum	4	172.00	0.15	0.75	77.40		
	Connectting SWD Drain	Cum	2	16.70	0.15	0.90	4.51		
	Cross Road 3	Cum	2	34.60	0.15	0.60	6.23		
	Cross Road	Cum	4	56.00	0.15	0.75	25.20		
						Sub Total	**314.40**		
	New Culvert								
	Bottom Raft								
	Main Road	Cum	1	9.00	2.10	0.20	3.78		
		Cum	1	6.40	2.10	0.20	2.69		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
		Cum	1	8.30	2.10	0.20	3.49		
		Cum	1	6.80	2.10	0.20	2.86		
		Cum	2	6.80	2.10	0.20	5.71		
	Side Walls								
	Main Road	Cum	2	9.00	0.20	0.75	2.70		
		Cum	2	6.40	0.20	0.75	1.92		
		Cum	2	8.30	0.20	0.90	2.99		
		Cum	2	6.80	0.20	0.90	2.45		
		Cum	4	6.80	0.20	0.75	4.08		
						Sub Total	**32.66**		
	Basic rate	6670.00							
	Area weightage 6%	400.20							
	Sub Total	7070.20							
	Total						**347.06**	**7070.20**	**2453780.08**
4	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From item no.7				314.40		
		kg	Steel assumed 60Kg/Cum of Concrete				18864.09		
		tonne					18.86		
	For Culvert	Cum	From item No 07				32.66		
		kg	Steel assumed 90Kg/Cum of Concrete				2939.22		
		tonne					2.94		
	Basic rate	61365.00							
	Area weightage 6%	3681.90							
	Sub Total	65046.90							
	Total						**21.80**	**65046.90**	**1418237.73**
5	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Cross Road -1	Sqm	1	45.00	0.75		33.75		
	Cross Road 2	Sqm	1	43.00	0.60		25.80		
	Cross Road 5	Sqm	1	47.00	0.60		28.20		
	Cross Road 6	Sqm	2	48.00	0.60		57.60		
	Cross Road 7	Sqm	1	40.00	0.60		24.00		
	Cross Road 10	Sqm	1	38.00	0.60		22.80		
	Cross Road 11	Sqm	1	29.00	0.60		17.40		
	Main Road	Sqm	2	172.00	0.90		309.60		
	Connectting SWD Drain	Sqm	1	16.70	0.90		15.03		
	Cross Road 3	Sqm	1	34.60	0.60		20.76		
	Cross Road	Sqm	2	56.00	0.75		84.00		
	Data Rate	**2337.00**							
	Total						**638.94**	**2337.00**	**1493202.78**
6	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incha								
	New Culvert								

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Main Road	Sqm	1	9.00	1.80		16.20		
		Sqm	1	6.40	1.80		11.52		
		Sqm	1	8.30	1.80		14.94		
		Sqm	1	6.80	1.80		12.24		
		Sqm	2	6.80	1.80		24.48		
	Data rate	**5418.00**							
	Total						**79.38**	**5418.00**	**430080.84**
7	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	For New CC Road								
	Cross Road -1	Cum	1	45.00	3.60	0.45	72.90		
	Cross Road 2	Cum	1	43.00	3.70	0.45	71.60		
	Cross Road 5	Cum	1	47.00	3.70	0.45	78.26		
	Cross Road 6	Cum	1	48.00	3.20	0.45	69.12		
	Cross Road 7	Cum	1	40.00	3.30	0.45	59.40		
	Cross Road 10	Cum	1	38.00	3.50	0.45	59.85		
	Cross Road 11	Cum	1	29.00	2.40	0.45	31.32		
	Cross Road 3	Cum	1	34.60	3.40	0.45	52.94		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	**56.26**							
	Total						**495.38**	**56.26**	**27869.97**
8	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)								
	Cross Road -1	Sqm	1	45.00	3.60		162.00		
	Cross Road 2	Sqm	1	43.00	3.70		159.10		
	Cross Road 5	Sqm	1	47.00	3.70		173.90		
	Cross Road 6	Sqm	1	48.00	3.20		153.60		
	Cross Road 7	Sqm	1	40.00	3.30		132.00		
	Cross Road 10	Sqm	1	38.00	3.50		133.00		
	Cross Road 11	Sqm	1	29.00	2.40		69.60		
	Cross Road 3	Sqm	1	34.60	3.40		117.64		
	Basic rate	6.00							
	Area weightage 6%	0.36							
	Sub Total	6.36							
	Total						**1100.84**	**6.36**	**7001.34**
9	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								

Description of work	Unit	Mesurement				Qty	Rate	Amount
		No.	L	B	D			
New Road								
Cross Road -1	Cum	1	45.00	3.60	0.15	24.30		
Cross Road 2	Cum	1	43.00	3.70	0.15	23.87		
Cross Road 5	Cum	1	47.00	3.70	0.15	26.09		
Cross Road 6	Cum	1	48.00	3.20	0.15	23.04		
Cross Road 7	Cum	1	40.00	3.30	0.15	19.80		
Cross Road 10	Cum	1	38.00	3.50	0.15	19.95		
Cross Road 11	Cum	1	29.00	2.40	0.15	10.44		
Cross Road 3	Cum	1	34.60	3.40	0.15	17.65		
Basic rate	1882.00							
Area weightage 6%	112.92							
Sub Total	1994.92							
Total						**165.13**	**1994.92**	**329413.16**

10 Cement concrete pavement.Construction of un-reinforced plain cement concrete for pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008.mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire charges of machineries,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum Pg No.176Item No.22.6.1

Cross Road -1	Cum	1	45.00	3.60	0.15	24.30		
Cross Road 2	Cum	1	43.00	3.70	0.15	23.87		
Cross Road 5	Cum	1	47.00	3.70	0.15	26.09		
Cross Road 6	Cum	1	48.00	3.20	0.15	23.04		
Cross Road 7	Cum	1	40.00	3.30	0.15	19.80		
Cross Road 10	Cum	1	38.00	3.50	0.15	19.95		
Cross Road 11	Cum	1	29.00	2.40	0.15	10.44		
Cross Road 3	Cum	1	34.60	3.40	0.15	17.65		
Basic rate	4916.00							
Area weightage 6%	294.96							
sub Total	**5210.96**							
Total						**165.13**	**5210.96**	**860464.98**

ADMINISTRATIVE APPROVAL
Accorded For Rs. 100.00 Lakhs only
Head of Acc. P3075
Ref. No. 20/20-21 Date 25-8-2020
AE 25/08
EE(BTP) 27/08

Grand Total	**8927369.90**
GST Charges (12% of estimated cost)	**1071284.39**
Miscellenious and rounding	**1345.71**
Total Amount	**10000000.00**
RUPEES ONE CROREONLY	

Sanctioned for Rs. 100.00 LAKH HUNDRED LAKH ONLY
P3075
Job Code No. 006-21-00014 14/2021 subject to conditions contained in enclosed memo registered at SE(Y)/TS/ 20-21 dated: 26/8/2020
NO 14/ SE(Yel) TA 26/8/2020

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP
20/08